



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
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BOSTON, MASSACHUSETTS 02109-3912

February 4, 2016

Mr. Rick Greenwood
Deputy Director
Rhode Island Historical Preservation & Heritage Commission
Old State House
150 Benefit Street
Providence, RI 02903

RE: Notification of Potential Adverse Effect - Mill Cove/Bayside Sewer Project, Warwick, RI

Dear Mr. Greenwood:

EPA has been coordinating closely with the City of Warwick and the Narragansett Indian Tribe as well as the Rhode Island Historical Preservation & Heritage Commission (RIHPHC) in the planning and design of the proposed Mill Cove/Bayside sewer project over the past number of years. Funding for the construction of this project will include EPA State Revolving Fund (SRF) financial assistance. As a result, the project is a federal "undertaking" as defined in the Advisory Council of Historic Preservation (ACHP) regulations at 36 CFR 800.16(y).

As a result and in accordance with section 106 of the National Historic Preservation Act, to assess the effects of this undertaking on historic properties, Public Archaeological Laboratory (PAL) conducted a cultural resource management survey. This survey identified potential historic properties within the project's Area of Potential Effect (APE). Based upon the findings of the initial 2009 archaeological study, in 2012, EPA recommended that the Mill Cove/Bayside sewer project APE be considered eligible for listing on the National Register of Historic Places. In April 2012, the RIHPHC concurred with this recommendation.

From November through December 2015, PAL conducted an archaeological investigation of a proposed sewer alignment along Tidewater Drive. The investigation revealed numerous tribal historic properties, including two human burials, as indicated in the attached slides from PAL. While this archaeological investigation was conducted to determine whether the proposed sewer project along Tidewater Drive could be constructed to avoid adverse effects on historic properties, it has now become evident, due to the density of features discovered in the relatively small area of exploration, that the construction of this project has the potential to adversely affect historic properties not yet encountered, even if technologies such as directional drilling are employed to minimize the risk of disturbance.

In accordance with 36 CFR 800.4(d)(2), EPA has determined that this federal undertaking has the potential to effect historic properties. EPA invites the RIHPHC and other consulting parties to share their views on the effects, and commits to the assessment of adverse effects, if any, in accordance with 36 CFR 800.5.

As the responsible Federal agency and in accordance with 36 CFR 800.6, EPA is committed to the continuation of consultation with the Narragansett Indian Tribe, RIHPHC, and the City of Warwick. In addition, opportunities for public involvement will be provided to determine appropriate construction methods and technologies to avoid, minimize, or mitigate adverse effects on historic properties to the maximum extent possible. EPA will work with the Town of Warwick, the Narragansett Indian Tribe and the RIHPHC to reach agreement on measures to avoid, reduce or mitigate adverse effects for the project area through the execution of a Memorandum of Agreement. In addition, EPA will notify the ACHP of this finding, and will invite the Council to participate in the consultation process and execution of an MOA.

Please contact the EPA Region 1 Indian Program Manager, CAPT Michael A. Stover, PE, at (617) 918-1123 if you have any questions. I look forward to your working with you to assess and resolve the adverse effects, if any, that could result from this project.

Sincerely,



Ken Moraff
Director, Office of Ecosystem Protection

cc: Charlotte Taylor, RIHPHC
Tim Ives, RIHPC
Janine Burke, Warwick Sewer Authority
John Brown, Narragansett Indian Tribe

Attachment: email transmission from Alan Leveillee, PAL, to Michael Stover, EPA

From: [Alan D. Leveille](#)
To: [Stover, Michael](#)
Subject: Powerpoint slides- summary
Date: Tuesday, January 26, 2016 2:54:46 PM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)

Hi Mike-

Please see the attached slides for your use-

Regards,
Alan

Initial Investigations (September- November):

- 84 Features recorded
- 78 assigned Native American origins
- 6 assigned 18th & 19th century

Of the 84 features identified, 33 (39%) were subject to evaluation and verification via excavation and analyses. The selected features were those identified by NITHPO and PAL, in consultation.

Evaluation Preliminary Results (November – December) include that, of the 33 features:

- *All were considered to be purposefully dug pits & deposits -where subsequent to use their initial surfaces had been impacted and / or removed by more recent landscape changes*
- *48% were deeper than 40cm during excavation (n=16)*
- *89% contained shell (n=27)*
- *64% contained bone fragments (n=21)*
- *42% contained aboriginal ceramic fragments (n=14)*
- *89% contained lithic chipping debris (n=27)*
- *6% were formal human burials (n=2)*
- *30% had associated post molds (n=10)- including both confirmed burials*

SOME IMPLICATIONS CONSIDERING THE TIDEWATER DRIVE RESULTS



- The area of the Mill Cove Site (as indicated **here**) is approximately **170-acres**
- The excavated trench along Tidewater Drive exposed a total area of approximately **½-acre**
- **78 pre-contact Native American features** were verified
- Projecting those results we can extrapolate a density for the site of approximately **150 features per acre (4 of which could be burials)**
- Accordingly, we can anticipate **+/- 25,000 features (650 of which could be burials)** across the Project area.
- If we speculate that between **50% and 70%** of the features across the site *have been destroyed by historic development*, a range of between **12,500 and 7,500 features can still be expected (325-195 of which could be burials).**

Conclusions and Recommendations

The Mill Cove Archaeological Site is highly significant. It contains data that has added, and promises to continue to add, to research on pre-contact and contact period Native American village life in coastal southern New England. *It is one of only two definitive villages identified in the region to date (Salt Pond, Narragansett, being the other).*

The cultural ecology of Native American village formation and life prior to, during, and following European settlement has here to fore been entirely dependent upon written historical accounts. **The Mill Cove Site will change that.**

With temporal components dating, in part, to the King Philip's War era (1675/76) this site can also contribute to **conflict-related research on that topic.**

As the sewer project proceeds, ongoing **consultation, communication, and collaboration between all parties will be imperative.** Protocols for archaeological data recovery and related analyses need to be comprehensive And far-sighted in the light of discoveries to date.

- The EPA needs to make a *Determination of Effect* on the site relative to the undertaking
- The NITHPO needs to reach a decision regarding either preservation in place or removal and re-burial for features 23 and 38. Furthermore, NITHPO should consider whether protocols for as yet identified burial features will be determined on a case by case basis as discoveries are made, or the establishment of a Project-wide policy applicable to past and future burial discoveries for the duration of sewer construction.

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PAL

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